ENVIRONMENTAL CLEANUP MAJCOM LEVEL PERSPECTIVE

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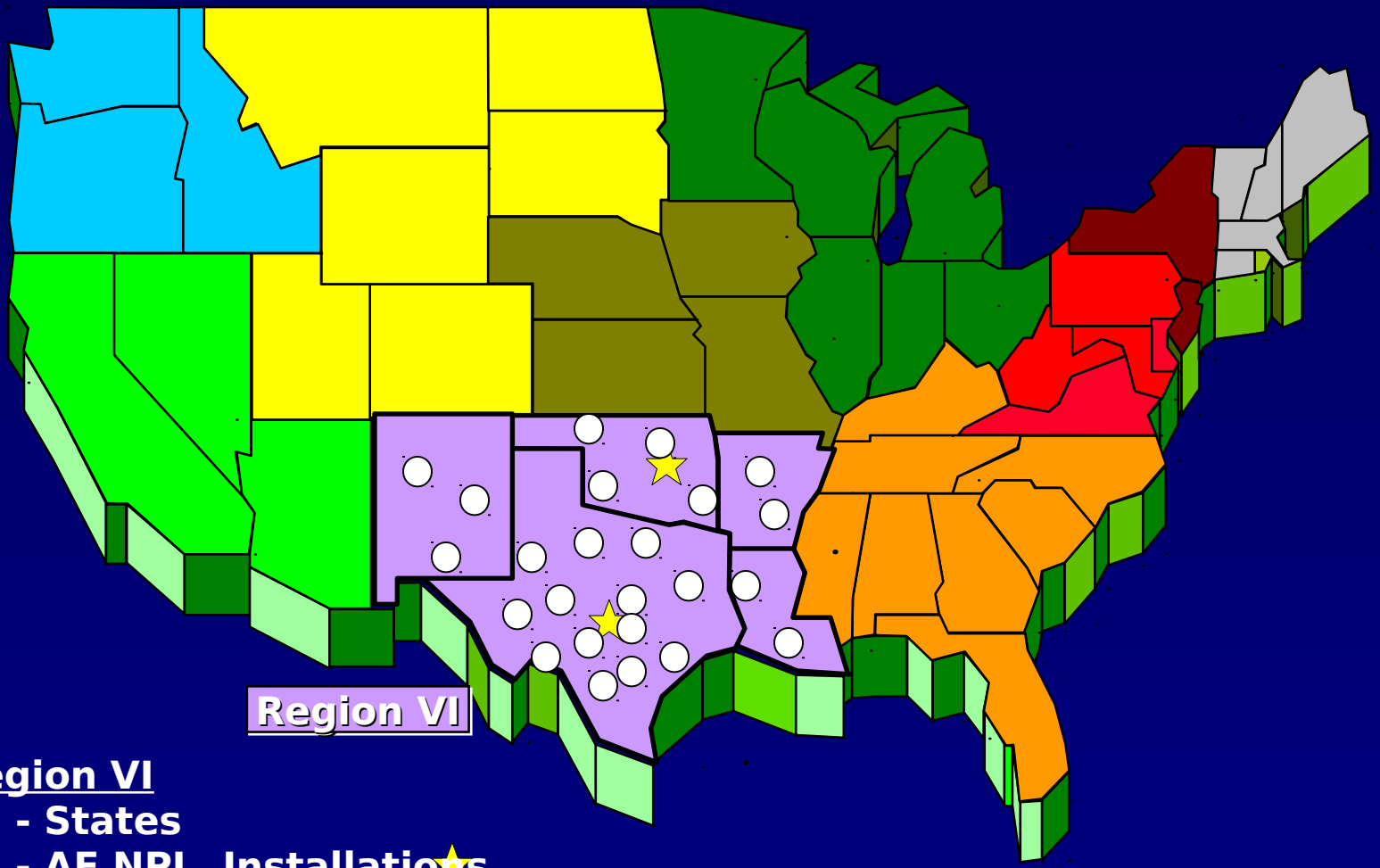
Overview

- Scope of the Regional Program
- Goals and Objectives
- Completion Strategy
- Site Cleanup Inventory
- Schedule to Complete
- Cost to Complete
- Stakeholder Involvement
- Regional Success Stories
- Challenges to Progress

Installations in Region VI



Region VI

5 - States

2 - AF NPL Installations

24 - AF Non-NPL Installations

Air Force Major Commands (MAJCOMs) Located within Region VI

AETC

Air Education and Training Command Randolph AFB Texas

ANG

Air National Guard Readiness Center Andrews AFB Maryland

AFMC

Air Force Materiel Command Wright-Patterson AFB Ohio

AFCEE

Air Force Center for Environmental Excellence Brooks AFB Texas

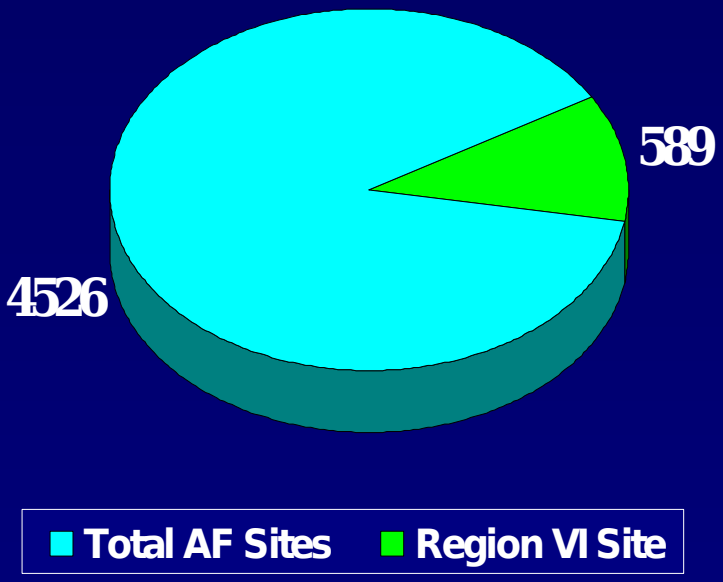
ACC

Air Combat Command Langley AFB Virginia

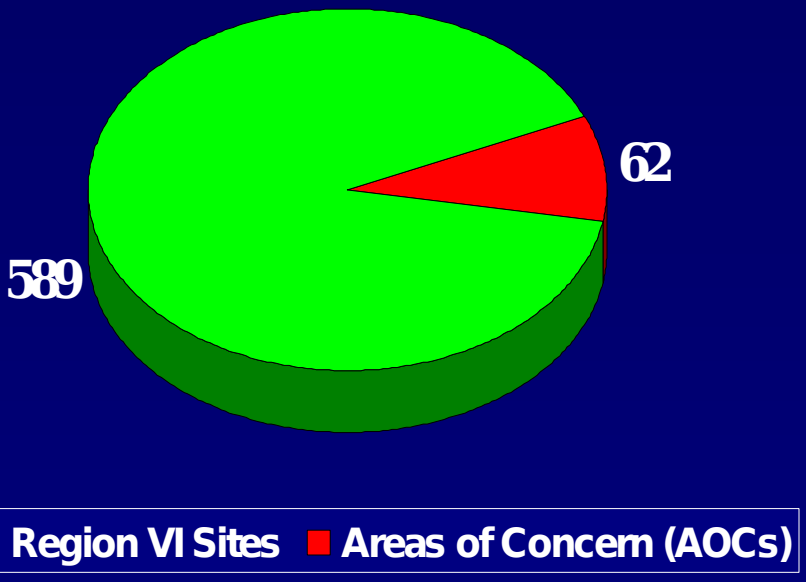
1. Listing of MAJCOMs excludes Air Force Space Command (AFSPC), Air Force Reserves Command (AFRC), Air Mobility Command (AMC), Special Operation Command (SOC), Air Force Academy (USAFA), Pacific Air Force (PACAF), 11CES(Bolling AFB).

Regional Cleanup Program - Site Perspective

Total Air Force



Region VI



Goals and Objectives

- Protect Human Health & the Environment
- Comply with All Legal Agreements
- Reduce Risk to Human Health & the Environment
- Move Sites and Installations to Completion
  - Cleanup Systems in Place - Indicator
- Timely Execution within Budget
- Program Credibility
  - Inventory Control
  - Defendable Requirement
- Be a Good Neighbor
  - Credibility Through Effective Communication

Completion Strategy

- **Promote/Require Deliberate Scheduling**
  - **Where we are - Inventory Control**
  - **Where we are going - Schedule/Cost to Complete**

Why??

- **Support Budget Request**
- **Vehicle to Work with Regulatory Agencies to Revise Legal Schedules**
- **Build and Sustain Community Trust**

Completion Strategy (cont)

- **Apply Sound Business Investment Strategy**
  - **Cleanup -vs- Study…… But NOT NO STUDY**
    - **Voluntary Interim Cleanup Actions**
  - **Reduce Overhead Expenses**
  - **Risk Reduction - Worst First**
  - **Build Requirements to Budget Targets**
    - **Be Ready to Accelerate Out-year Requirements if Funds Become Available**

Completion Strategy (cont)

- Use Restoration Advisory Boards
  - Assist with Work Priority and Sequencing
- Focus on Efficient, Cost Effective Technologies
  - Benchmark Best Methods
  - Use PEER Review to Optimize Cleanup Approach
  - Incorporate Innovative Technologies
  - Use Presumptive Remedies - Avoid Unnecessary Study
  - Reduces Cost to Complete

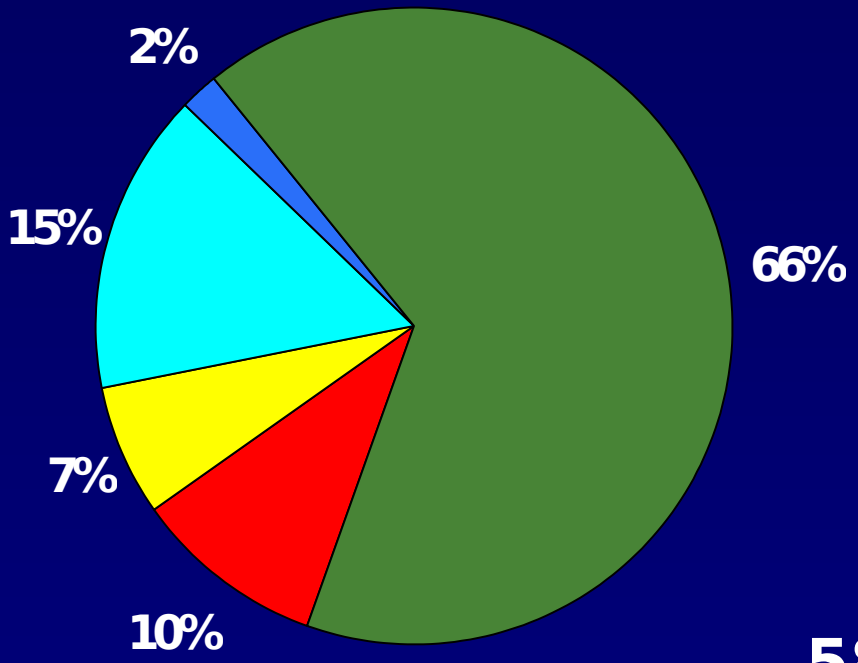
Regional Site Cleanup Inventory

Area of Concern		Validated IRP Site						
Total	Study/ Removal	Total	Study	Cleanup	RA-O	LTM	NFRAP	SC
62	12	589	231*	12	12	62	272	225

* Interim Remedial Actions taken, underway or operating at 63 site

RA-O - Remedial Action - Operation
LTM - Long Term Monitoring
NFRAP - No Further Remedial Action Planned
SC - Site Closed (Regulator Concurrence)

Regional Relative Risk Profile



589 Sites

High | Medium | Low | Not Evaluated | Not Required

Relative Risk by State

State	Base Name	MAJ COM	Total	High	Medium	Low	Not Evaluated	Not Required
AR	Hot Springs Arpt	ANG	2	0	1	1	0	0
AR	Little Rock AFB	AETC	27	5	0	4	0	18
LA	Barksdale AFB	ACC	36	0	1	3	0	32
LA	Hammond Comm Station	ANG	3	0	2	0	0	1
NM	Cannon AFB	ACC	27	0	0	0	0	27
NM	Holloman AFB	ACC	63	2	0	0	0	61
NM	Kirtland AFB	AFMC	77	6	4	14	8	45
OK	Air Force Plant 3	AFMC	12	0	0	0	0	12
OK	Altus AFB	AETC	16	6	0	10	0	0
OK	Tinker AFB	AFMC	40	9	2	8	0	21
OK	Tulsa Int'l Aprt	ANG	1	0	1	0	0	0
OK	Vance AFB	AETC	25	8	1	0	0	16

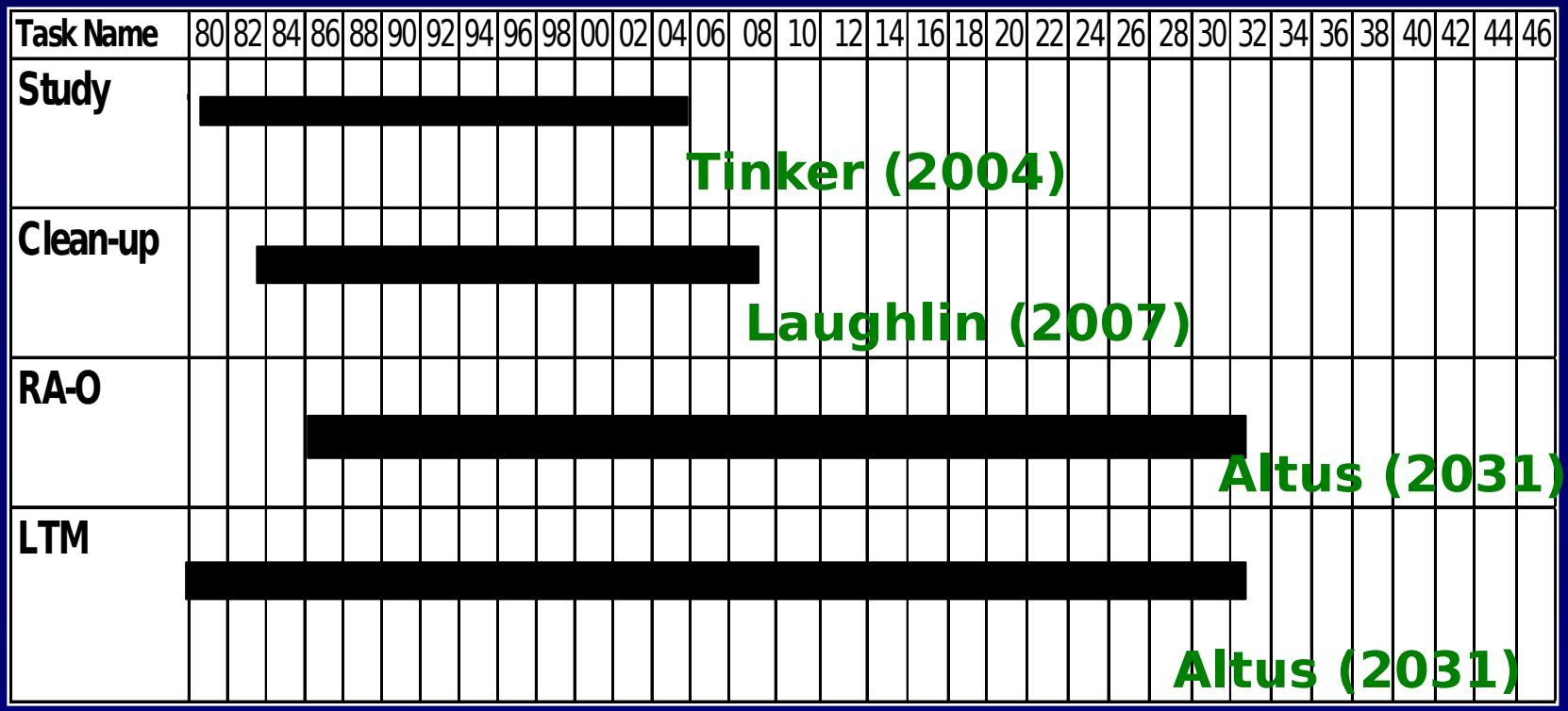
Relative Risk by State

State	Base Name	MAJ COM	Total	High	Medium	Low	Not Evaluated	Not Required
TX	Air Force Plant 4	AFMC	30	0	1	0	0	29
TX	Brooks AFB	AFMC	11	0	0	0	0	11
TX	Dyess AFB	ACC	43	0	0	0	0	43
TX	Ellington Field ANG	ANG	4	0	0	0	0	4
TX	Garland ANG Station	ANG	2	0	0	0	0	2
TX	Goodfellow AFB	AETC	5	0	0	0	0	5
TX	Kelly AFB	AFMC	24	9	4	2	2	7
TX	Lackland AFB	AETC	29	3	1	1	0	24
TX	Laporte ANG Station	ANG	2	0	0	0	0	2
TX	Laughlin AFB	AETC	15	5	2	5	1	2
TX	NAS Fort Worth/Carwell	AFCEE	53	0	10	38	0	5
TX	Nederland ANG	ANG	1	0	0	0	0	1
TX	Randolph AFB	AETC	23	3	3	3	0	14
TX	Sheppard AFB	AETC	18	1	6	2	0	9

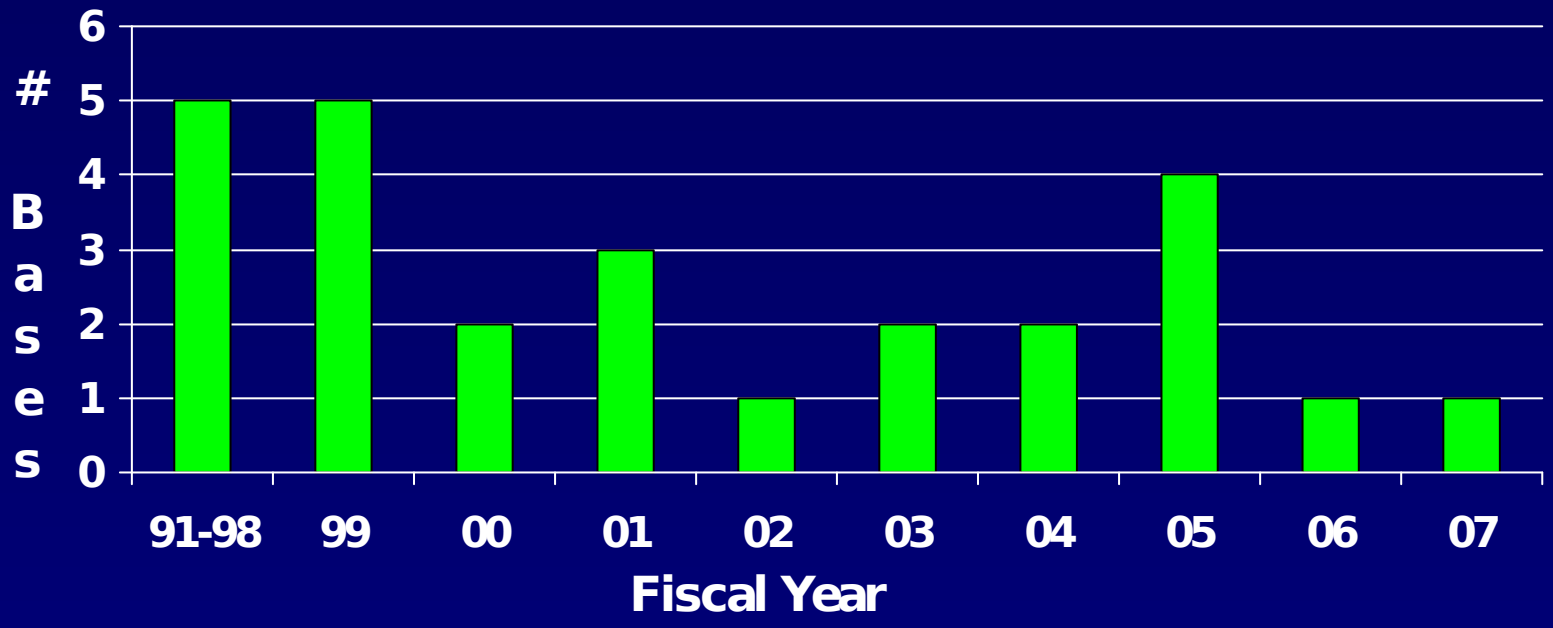
Regional Schedule to Complete

- Complete study at all sites by end of 2004
- Remedial Design completed for all sites by end of 2006
- Remedial System construction complete by end of 2007
- Operation of remedial systems for majority of sites complete by 2009
- Operation of remedial systems at complex sites completed by 2031 and beyond

Regional Schedule to Complete



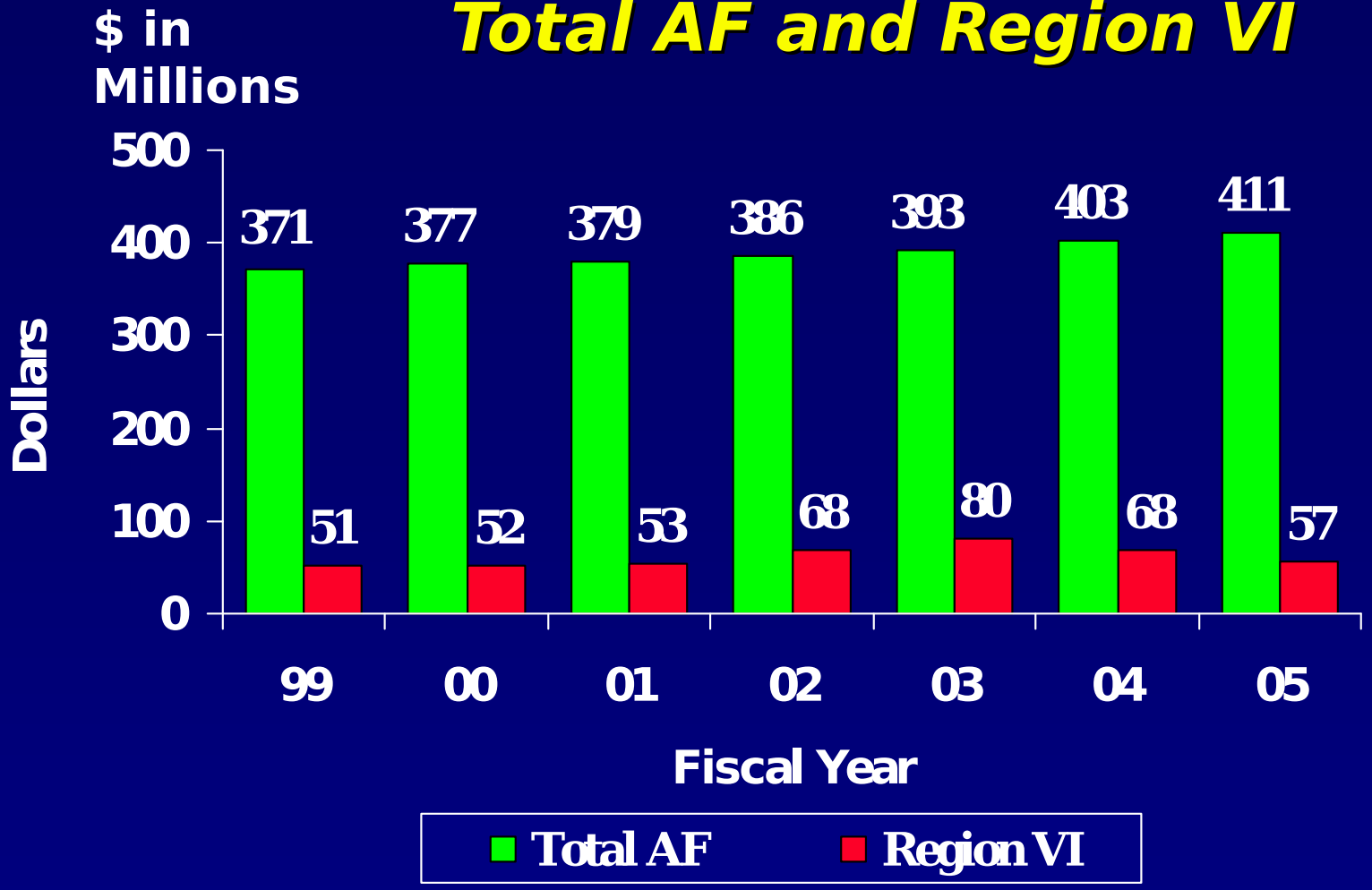
Final Remedies in Place



1991-1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Ellington Field	Hot Springs Arpt	Hammond	Barksdale	Sheppard	Vance	Kelly	Altus	Little Rock	Laughlin
Garland	Cannon	Dyess	Holloman		NAS Fort Worth/ Carwell	Lackland	Kirtland		
Laporte	AF Plant 3		AF Plant 4				Tinker		
Nederland	Tulsa Int'l Aprt						Randolph		
Goodfellow	Brooks								

Regional Funding Projections

Total AF and Region VI



Cost to Complete - Arkansas

Base Name	MAJ COM	Funding Thru FY98 ($000)	FY99 Funding ($000)	FY00 Funding ($000)	FY01 to Completion ($000)
Hot Springs Arpt	ANG	$331.5	$19.3	$150.0	$90.0
Little Rock AFB	AETC	$12,281.5	$3,265.7	$2,676.9	$17,444.7
TOTAL		$12,613.0	$3,285.0	$2,826.9	$17,534.7

Cost to Complete - Louisiana

Base Name	MAJ COM	Funding Thru FY98 ($000)	FY99 Funding ($000)	FY00 Funding ($000)	FY01 to Completion ($000)
Barksdale AFB	ACC	$6,800.0	$1,160.0	$900.0	$13,400.0
Hammond Comm Station	ANG	$337.4	$83.5	$0.0	$50.0
TOTAL		$7,137.4	$1,243.5	$900.0	$13,450.0

Cost to Complete - New Mexico

Base Name	MAJ COM	Funding Thru FY98 ($000)	FY99 Funding ($000)	FY00 Funding ($000)	FY01 to Completion ($000)
Cannon AFB	ACC	$9,900.0	$94.2	$120.0	$6,706.7
Holloman AFB	ACC	$30,500.0	$884.9	$783.4	$2,576.0
Kirtland AFB	AFMC	$24,972.9	$8,395.0	$10,260.0	$74,840.5
TOTAL		$65,372.9	$9,374.1	$11,163.4	$84,123.2

Cost to Complete - Oklahoma

Base Name	MAJ COM	Funding Thru FY98 ($000)	FY99 Funding ($000)	FY00 Funding ($000)	FY01 to Completion ($000)
Air Force Plant 3	AFMC	$4,156.2	$150.0	$320.0	$320.0
Altus AFB	AETC	$11,325.9	$4,647.4	$1,720.1	$76,769.1
Tinker AFB	AFMC	120.256.8	$14,735.0	$10,374.0	$140,411.0
Tulsa Int'l Aprt	ANG	$540.9	$193.5	$0.0	$0.0
Vance AFB	AETC	$18,017.5	$1,562.2	$1,200.5	$5,525.0
TOTAL		$34,040.5	$21,288.1	$13,614.6	$223,025.1

Cost to Complete - Texas

Base Name	MAJ COM	Funding Thru FY98 ($000)	FY99 Funding ($000)	FY00 Funding ($000)	FY01 to Completion ($000)
Air Force Plant 4	AFMC	$41,392.6	$3,205.0	$1,840.0	$29,200.0
Brooks AFB	AFMC	$38,545.1	$375.0	$349.0	$4,694.0
Dyess AFB	ACC	$10,600.0	$350.0	$435.3	$5,600.0
Ellington Field	ANG	$1,150.4	$0.0	$0.0	$50.0
Garland ANG Station	ANG	$145.0	$0.0	$0.0	$40.0
Goodfellow AFB	AETC	$2,759.2	$159.6	$969.1	$686.2
Kelly AFB	AFMC	$59,721.5	$2,615.0	$2,968.0	$55,283.0
Lackland AFB	AETC	$13,681.5	$2,339.3	$9,258.6	$74,322.0
Laporte ANG Station	ANG	$125.5	$0.0	$0.0	$40.0
Laughlin AFB	AETC	$5,602.6	$1,369.2	$2,663.8	$16,221.7
NAS Fort Worth /Carwell Field	AFCEE	$8,473.2	$3,830.0	$4,166.0	$4,416.0
Nederland ANG	ANG	$0.0	$0.0	$0.0	$25.0
Randolph AFB	AETC	$4,051.0	$484.0	$573.2	$2,799.0
Sheppard AFB	AETC	$6,762.0	$1,521.6	$269.1	$7,124.6
TOTAL		$193,009.6	$16,248.7	$23,492.1	$200,501.5

Stakeholder Involvement

- Restoration Advisory Boards (RABs)
  - Established at 15 installations
  - Represent the community (Regulators - Local business - Minorities)
  - Participate in site relative risk evaluations
  - Advise on site priorities and schedules
- Installation-level stakeholder input into the budgeting process
- Provide forums for feedback

Communicate, Communicate, Communicate

Regional Success Stories

- **Altus AFB: Partnering with EPA targets contaminants**
  - Targeted analyte compounds reduced resulting in lower project cost
- **Little Rock AFB: Consent Administrative Order (CAO)**
  - After 7+ years of discussions, ADEQ and Little Rock AFB reach accord
- **Overhead Cost Reduction**
  - US Army Corps of Engineers-Tulsa and AETC collaborate to justify overhead costs
- **Little Rock AFB: Post Closure Monitoring**
  - Sampling protocol optimized

Challenges to Progress

- Document Review Times
- Implementation of Institutional Controls
- Regulatory Concurrence on Site Closure
- Ever changing guidance, regulations and policy
- Post Site Closure Monitoring